



## Health promotion in European schools: a report on its monitoring

## Promoção de saúde nas escolas europeias: relato da sua monitorização

## Promoción de la salud en las escuelas europeas: relato sobre su monitorización

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### Abstract

In 1991, the World Health Organization launched the European Network of Health Promoting Schools. Subsequently, in 2017, the Schools for Health in Europe (SHE) was created with the aim of improving the health of children and young people in Europe through a specific focus on schools. Several European countries are part of this network and have created the



health promoting schools' approach to implement structured and systematic health promotion plans in schools. SHE monitors the implementation of school health in member countries, producing a report that includes those countries' data. This article presents an analysis of the latest 2020 monitoring reports from 14 European Union countries. The study used a qualitative approach through the documentary analysis technique. The analysis concludes that although many schools in the European Union are health promoting, not all of them follow the health education approach in planning their activities. The main topics addressed are physical activity, *ex aequo* with healthy eating. It is possible to identify the main facilitator of health promotion in schools: intersectoral collaboration between the health and education sectors. Finally, the main barrier to the implementation of health promotion is the feeling of overload expressed by the teachers.

**Keywords:** Health education; Schools for Health in Europe; Monitoring reports.

#### Resumo

A Organização Mundial da Saúde criou, em 1991, a Rede Europeia de Escolas Promotoras da Saúde. Posteriormente, em 2017, foi criada a rede de *Schools for Health in Europe* (SHE), com o objetivo melhorar a saúde das crianças e jovens na Europa, através de um enfoque específico nas escolas. Vários países europeus fazem parte desta rede e criaram a abordagem escolas promotoras de saúde com o objetivo de implementarem planos estruturados e sistemáticos de promoção da saúde nas escolas. A SHE monitoriza a implementação da saúde escolar nos países membros, elaborando um relatório para cada país. O presente artigo apresenta uma análise dos últimos relatórios de monitorização, de 2020, de 14 países da União Europeia. O estudo recorreu a uma abordagem qualitativa através da técnica de análise documental. A análise conclui que, embora muitas escolas da União Europeia sejam escolas promotoras de saúde, nem todas seguem a abordagem da educação para a saúde no planeamento das suas atividades. Os principais temas abordados são a atividade física, *ex aequo*, com a alimentação saudável. É possível identificar o principal elemento facilitador da promoção de saúde em contexto escolar: colaboração intersectorial entre os setores da saúde e da educação. Por último, verifica-se que a principal barreira à implementação da promoção de saúde consiste no sentimento de sobrecarga manifestada pelos professores.

**Palavras-chave:** Educação para a saúde; Escolas Promotoras de Saúde na Europa; Relatórios de monitorização.

#### Resumen

La Organización Mundial de la Salud creó, en 1991, la Red Europea de Escuelas Promotoras de la Salud. Posteriormente, en 2017, se creó las *Schools for Health in Europe* (SHE), con el objetivo de mejorar la salud de los niños y jóvenes en Europa, a través de un enfoque específico en escuelas. Varios países europeos forman parte de esta red y han creado el enfoque de escuelas promotoras de la salud con el objetivo de implementar planes estructurados y sistemáticos de promoción de la salud en las escuelas. SHE monitorea la implementación de la salud escolar en los países miembros, produciendo un informe para cada país. Este artículo presenta un análisis de los últimos informes de seguimiento, para 2020,



de 14 países de la Unión Europea. El estudio recurrió a un enfoque cualitativo a través de la técnica de análisis documental. El análisis concluye que, aunque muchas escuelas de la Unión Europea sean promotoras de la salud, no todas siguen el enfoque de educación para la salud en la planificación de sus actividades. Los principales temas abordados son, *ex aequo*, la actividad física con la alimentación saludable. Es posible identificar el principal elemento facilitador de la promoción de la salud en el contexto escolar: la colaboración intersectorial entre los sectores de salud y educación. Finalmente, el principal obstáculo para la aplicación de la promoción de la salud es el sentimiento de sobrecarga expresado por los profesores.

**Palabras clave:** Educación para la salud; Escuelas para la Salud en Europa; Informes de seguimiento.

## Introduction

At the end of the 1980s, following the signing of the Ottawa Charter, the World Health Organization (WHO) initiated the Health Promoting Schools (HPS) approach, a systematized procedure aimed at increasing the social, mental, and physical health and well-being of children in the educational environment (WHO, 1986). The formal HPS approach,

relates to schools that implement a structured and systematic plan for the health, well-being and the development of social capital of all pupils and of teaching and non-teaching staff. This is characterized as a 'whole school approach' and these schools actively involve pupils, staff and parents in the decision-making and implementation of health promoting interventions in the whole school system (Bartelink et al., 2020, p. 1).

Dadaczynski et al. (2020) add that the HPS "reflects a holistic approach that moves beyond individual behavior change by also aiming at organizational change through strengthening the physical and social environment, including interpersonal relationships, school management, policy structures, and teaching and learning conditions" (p. 12). Since its establishment, the HPS approach has become the main strategy for health promotion within the education system worldwide (Jourdan et al., 2021). Studies report that, to be effective, implementation of the HPS approach needs to be adapted to different country contexts (Dadaczynski et al., 2020; Langford et al., 2015).

Despite the fact that the concept of HPS has been interpreted and implemented according to different geographical, cultural, and educational contexts, its core values (equity, sustainability, inclusion, empowerment, and democracy) and pillars (school-wide approach to health, participation, school quality, evidence and schools and communities) have remained unchanged and are recognized, for example, by the Paris Declaration on Partnerships for the Health and Well-being of our Young and Future Generations (Dadaczynski et al., 2020; WHO, 2016).

However, a distinction needs to be made between the formal HPS approach and the health promoting school concept. Although not every school works according to the HPS approach,



many schools strive to promote the health of students and staff through concrete health promoting school activities (Bartelink et al., 2020). Such activities, which are not necessarily established by a structured and systematic plan as in the HPS approach (Bartelink et al., 2020), are grounded in six pillars: healthy school policies; the school's physical environment; the school's social environment; individual health skills and action competencies; community links; and health services (IUHP, 2010).

At the European level, the European Network of Health Promoting Schools (ENHPS) was created in 1991 by WHO, in collaboration with the Commission of the European Communities and the Council of Europe (Barnekow-Rasmussen, 2005; Lusquinhos & Carvalho, 2019). Currently, the non-profit organization Schools for Health in Europe (SHE) comprises a network of health professionals who promote health in schools in 40 countries in Europe and Central Asia and aims to support the development and implementation of the HPS approach in participating countries (SHE, 2022).

The SHE focuses on making health and well-being an integral part of development policy in education and health, encouraging both sectors to work together more effectively (Young, Leger & Buijs, 2013). In addition, SHE encourages each member country to develop and implement a national policy on school health promotion, drives research and collaboration on knowledge transfer on school health promotion through the SHE Research Group, and stimulates schools to develop and implement health promotion activities by providing a range of support and training materials for professionals working on school health promotion (Santos et al., 2021). We can define health education as an educational process that informs, motivates, and helps the population and the individual to adopt and maintain healthy practices and lifestyles, advocating for the environmental changes necessary to facilitate these goals (WHO, 2021).

In order to monitor the implementation process of HPS in the European Union member countries, SHE produces individual reports – the SHE monitoring report - in collaboration with the national coordinator of each country. These reports are composed of a set of six indicators defined for all countries that allow their findings to represent the coordinators' perceptions of school health promotion and the HPS approach in schools in their respective countries (Bartelink et al., 2020). The 2020 report present an atypical situation in common due to COVID-19, which "drastically altered school health promotion due to the country-specific measures for combating the pandemic" (Bartelink et al., 2020, p. 5).

Within this principled framework, the study presented in this article started with the following research question: How is health promotion and education developed in the HPS? In order to answer the question, the article is organized into the following four sections: a) Health Promoting Schools, which presents the relationship between number of HPS and schools using the HPS approach; b) Health promotion themes, which identifies the most commonly addressed themes in schools; c) Facilitating elements of health promotion in schools, which exposes and discusses the most significant facilitators for the implementation of health promotion in schools; and d) Barriers to the implementation of health promotion in schools, which communicates the main difficulties in the implementation of health promotion in schools.



## Method

The study applied a qualitative approach through documental analysis. The SHE monitoring report 2020 (Bartelink et al., 2020) with the latest available version for 14 European Union countries was analyzed: Austria, Denmark, Estonia, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Slovenia and Sweden. The other EU countries do not have such a monitoring report available.

For this study, the four common variables for health promotion and education were considered: a) the number of HPS; b) the main topics of HPS; c) facilitating aspects of HPS; and d) barriers identified in HPS.

The information was subjected to a documental analysis process and presented as graphs and overviews.

## Results and discussion

### Health Promoting Schools

The results revealed that, with the exception of Austria, Hungary and Ireland, the countries analyzed presented more HPS than schools using the HPS approach (Tables 1 and 2). It is worth noting that the information on the number of HPS is not included in the reports from Latvia and the Netherlands.

Table 1. Percentage of HPS by country

Countries	HPS			
	Preschools	Primary schools	Secondary schools	Vocational schools
Austria	100	100	100	51-75
Denmark	51-75	26-50	26-50	1-25
Estonia	100	100	100	-
Greece	76-99	100	76-99	-
Hungary	100	100	100	100
Ireland	-	100	100	100
Italy	-	76-99	76-99	-
Latvia	-	-	-	-
Lithuania	100	100	100	76-99
Netherlands	-	-	-	-
Poland	100	100	100	100
Portugal	76-99	100	100	51-75
Slovenia	100	100	51-75	51-75
Sweden	100	100	100	100



Table 2. Percentage of schools applying the HPS approach by country

Countries	Schools applying the HPS approach			
	Preschools	Primary schools	Secondary schools	Vocational schools
Austria	100	100	100	51-75
Denmark	0	51-75	1-25	1-25
Estonia	51-75	26-50	25-50	0
Greece	0	0	0	0
Hungary	100	100	100	100
Ireland	-	100	100	100
Italy	-	26-50	26-50	-
Latvia	1-25	1-25	1-25	0
Lithuania	26-50	1-25	26-50	1-25
Netherlands	-	1-25	26-50	26-50
Poland	1-25	1-25	1-25	1-25
Portugal	76-99	76-99	51-75	51-75
Slovenia	26-50	51-75	26-50	26-50
Sweden	-	1-25	-	-

The difference observed highlights that, despite being health promoting, many schools do not use the HPS approach in their programs and activities. This may be related to the fact that, in many of them, the HPS approach was built in combination with already existing health promotion programs (Driessen-Willems et al., 2022). According to these authors, such schools have taken existing health promotion programs and curricula and adapted them to the school context, as this strategy was considered less time-consuming and more effective. However, the same authors argue that programs have rarely been implemented with high fidelity, and more guidance and support to professionals on how to use the HPS spectrums in adapting their own approach in school contexts seems to be needed.

Nevertheless, Bartelink and Bessems (2021) reiterates that, although not all schools are employing the HPS approach, many of them “do take efforts to improve the health and well-being of children and school staff with concrete health promotion (HP) actions/activities” (p. 1). According to the report, one of the reasons for this scenario is the influence of several factors, such as the availability of financial support from the government, which can hinder the implementation of health promotion in school spaces, whether this is with or without the HPS approach (Bartelink & Bessems, 2021).

It is worth highlighting the noticeable difference in Austria, Hungary, and Ireland, the countries where the greatest agreement exists between the number of HPS and the number of schools where the HPS approach is actually implemented. However, despite this commonality, these three countries have very different organizational logics regarding health promotion strategies.

In Austria, at least until 2019, public schools were not obliged to follow a national health promotion curriculum, and most of them implemented health promotion activities on their own initiative (Teutsch & Gugglberger, 2020). Nevertheless, the Austrian healthy school concept includes



policies and activities in six different thematic areas: school environment and safety, nutrition, teaching and learning, physical activity, substance abuse prevention, and psychosocial health (Teutsch & Gugglberger, 2020).

In Hungary, there is a national strategy for health promotion in schools established in 2012, which takes a holistic approach (Somhegyi, 2019). In the Hungarian strategy, health promotion is understood as a task to be developed daily at school, with the participation of parents and institutions of its public environment. The strategy is based on four general tasks: healthy eating (potentially based on local food products); daily physical education, fulfilling the criteria of the health promotion strategy and other forms of physical activity; application of appropriate pedagogical methods, including from the arts, for the promotion of mental health; and promotion of children's health literacy and health skills (Somhegyi, 2019).

Ireland, particularly at the elementary school level, has a long-term voluntary program, the Activity, Confidence and Eating (ACE) Schools Programme, which was developed within the framework of the SHE network, aiming to optimize the implementation of health promotion programs in schools (Pérez-Jorge et al., 2021). Among other actions, the program encourages schools to participate by providing water bottles, cooking courses for parents and students, health-related books, and the support of nutritionists.

Furthermore, the ACE Schools Program grants an award with four rating levels (bronze, silver, gold, and platinum). To obtain an award, schools must meet health-related criteria in five themes: school leadership; community partnerships; promoting nutrition and dental health; promoting physical activity; and promoting mental health. By meeting the criteria within the themes, schools also fill the health promotion gaps identified in each element of the framework established by the SHE network (Bennett et al., 2016).

### Health promotion themes

The health promotion themes addressed in schools in the countries analyzed showed that physical activity, healthy eating, and the consumption of illicit psychoactive substances are the most commonly addressed topics. On the other hand, vaccination, gender equality and oral health are the themes least mentioned by the reports (Figure 1).



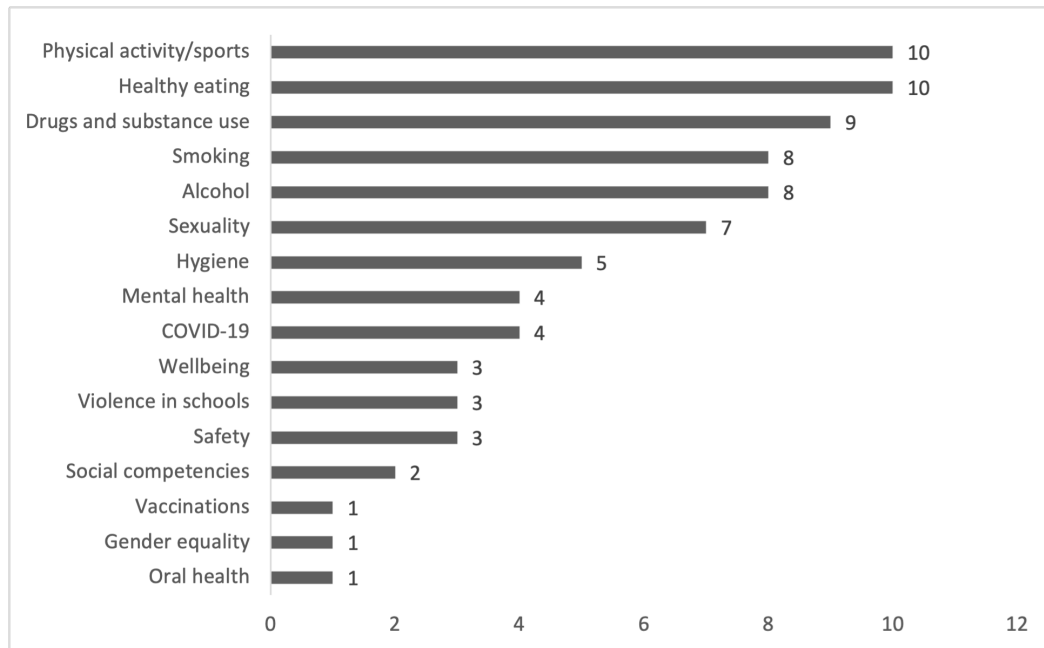


Figure 1. Health promotion themes most commonly addressed in schools in the countries analyzed

The results are consistent with those presented in the systematic review conducted by Silva et al. (2019). The authors identify that, of the five studies analyzed, four revealed develop health promotion activities related to healthy eating; three worked with the theme of preventing the consumption of alcohol, tobacco, and other psychoactive substances and with protective psychosocial factors, including activities related to affectivity, sexuality, and interpersonal relationships; and two indicated performing activities related to physical activity. They also point out that all studies promoted activities related to a healthy school environment, characterized, for example, by improving physical spaces, sanitation and environmental conditions, and the creation and conservation of green areas (Silva et al., 2019).

It is worth highlighting the importance of activities aimed at preventing overweight and obesity. In the context of the European Union, the Healthy Eating and Physical Activity in Schools (HEPS) project, which integrates the SHE network, was initiated with the aim of supporting Member States in the development of public policies related to these problems (Simovska et al., 2012), since they are associated with a set of consequences for physical and psychosocial health (Silva et al., 2019; WHO, 2022). Moreover, the frequent integration of physical activity in health promotion programs is also consistent with the WHO Global Action Plan for Physical Activity 2018-2030. The plan intends to reduce physical inactivity by 10% by 2025 and by 15% by 2030, aiming to achieve four general objectives to create: active societies, active environments, active people, and active systems (WHO, 2018).

The healthy eating theme also aligns with global commitments, notably UNESCO's Sustainable Development Goals (SDGs) (FAO, 2019). School-based health promotion programs enable synergies between the food available in schools and local nutrition guidelines and food system





initiatives, contributing to meeting some SDGs, such as, eradicating poverty, eradicating hunger, good health and education, decent work, and economic growth, reducing inequalities, and sustainable production and consumption (FAO, 2019).

Regarding the topic of the use of drugs and illicit substances, its inclusion in school health promotion programs is particularly relevant. According to the most current United Nations World Drug Report (UNODC, 2022), younger generations continue to use more drugs than adults, with even higher consumption patterns than in the past. According to Darcy (2021), the education framework for addictive behaviors and addictions in health promotion programs is more efficient if it presents an approach that is: holistic; structured; appropriate to the age, culture, and developmental level of the learners; with an emphasis on short-term risk; and focused on dispelling misconceptions or alternative conceptions.

The results highlight the low number of activities related to oral health, already identified by Silva et al. (2019). According to the authors, none of the studies analyzed addressed school oral health promotion activities. These data are unsatisfactory because about 33.3% of European Union citizens suffer from permanent dental caries, about 16.7% suffer from periodontal diseases, and 10.0% have total tooth loss (Winkelmann et al., 2022). These results confirm the need for greater investment in the promotion of oral health in schools, and it seems insufficient, in the Portuguese case, that this area is left only to the care of the health centers outside the school health education projects, as it is not included in their Referential. Without prejudice to the most priority needs in a global dimension, it is equally important to plan activities based on the local reality (Silva et al., 2019).

Moreover, it is worth highlighting that the topics of health promotion, well-being, violence, and safety were cited in only three reports as one of the most commonly addressed in schools. This is because the discussion about a safe and healthy school environment is related to the actions that are developed in the “Protective Psychosocial Factors” dimension, a necessary criterion for the accreditation of a health-promoting school (Silva et al., 2019).

Likewise, safety in the school space related to the physical, emotional, and psychological environment is an object of constant concern for school managers and teachers (Silva et al., 2019). Examples are bullying and other forms of violence. According to the study, between 5-35% of school-age children and adolescents have been involved in some way in aggressive conduct, attitudes, and behaviors at school, either as victims or as aggressors (Silva et al., 2019). Considering this, it is necessary to develop strategies, programs, and standards that disapprove of bullying and all forms of violence to establish a school environment that demonstrates respect, support, and care for all school actors.

### **Facilitators of health promotion in schools**

Regarding the significant facilitators for implementing health promotion in schools in each country, collaboration between the health and education sectors and national educational policies and curriculum were the most mentioned (Figure 2). On the other hand, participation in the SHE network, support from the Ministry of Health and exchange of good practices were the least mentioned facilitators.

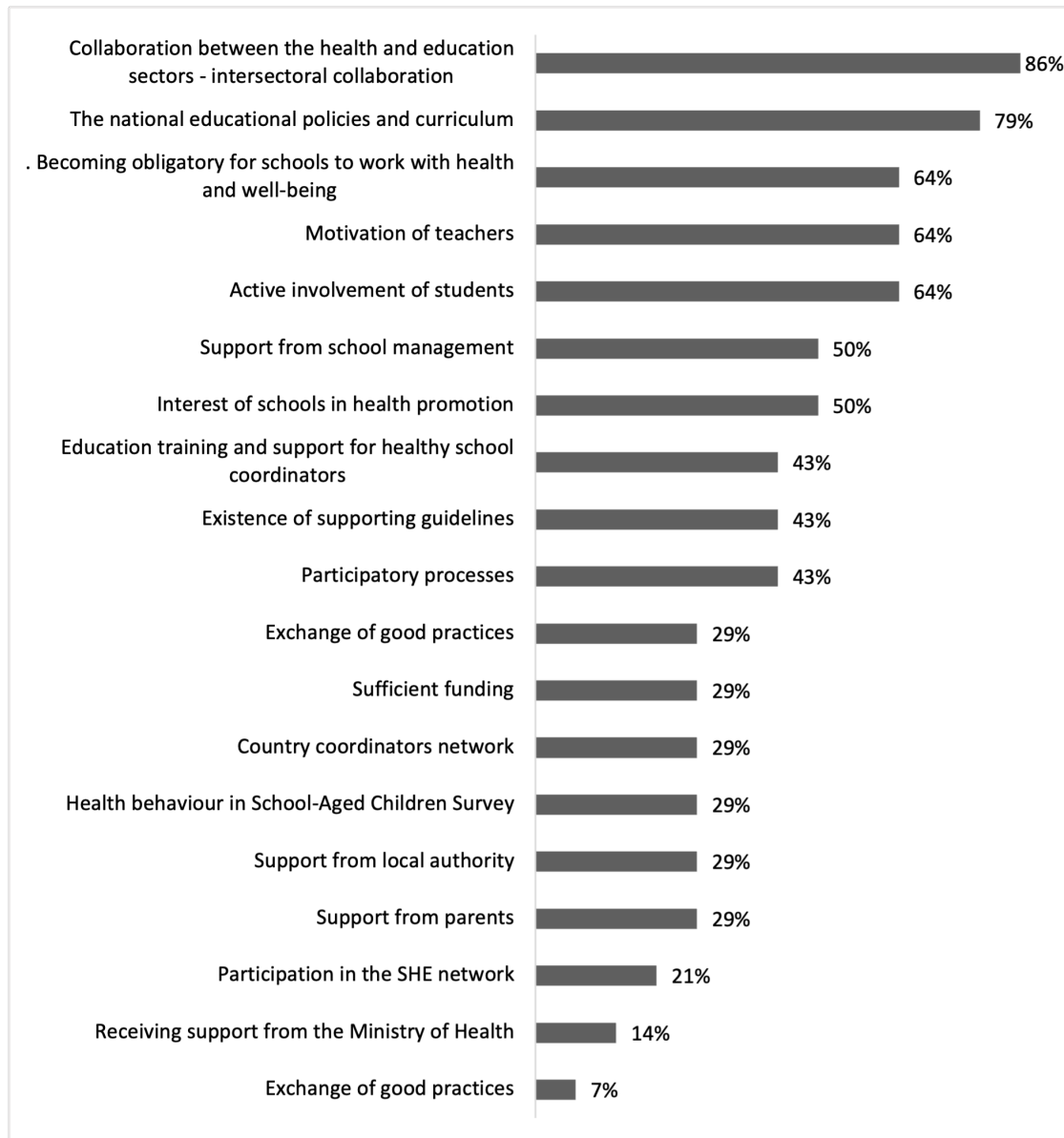


Figure 2. Significant facilitators for the implementation of health promotion in schools

The findings of the present study corroborate those exposed by Driessen-Willems et al. (2022), which reveal that collaboration between the health and education sectors, along with the adequacy of school rules, regulations, and legislation, was considered a facilitator in the implementation of multiple essential components in HPS. Analyzing the Portuguese context, Lusquinhos



and Carvalho (2019) state that the dialogue and collaborative work of the ministries of health and education is a key aspect of the successful implementation of health education programs. According to these authors, ensuring a continuous commitment, formalized through a collaboration agreement between the two ministries, enables implementing, updating, monitoring, and evaluating school health promotion strategies.

This outcome is in agreement with those of Silva et al. (2019), who showed that intersectorality is the main challenge in implementing and maintaining health-promoting schools. According to the authors, there is a debate regarding the definition of the roles and responsibilities of the actors involved in the planning and implementation of school health programs. This fact refers, in addition to intersectorality, to issues of interdisciplinarity and participation.

Casemiro et al. (2014), in their review on school health in Latin America, found results that support the need for greater interaction between the health and education sectors. The study recommending greater investment in the establishment of formal intersectoral coordination mechanisms.

A review in Latin America (Casemiro et al., 2014) identified the lack of interaction between the health and education sectors as a difficulty in implementing health promoting schools. Furthermore, Lopes et al. (2018) argue that, in Brazil, frequent criticism of school health programs and actions refers to the fact that they are mostly recommended by health professionals without links to the school curriculum content. The authors state that this aspect is referred to by several studies, which identify that “the majority of the studies presented the view of professionals, mainly from the area of health, pointing out the protagonism of this sector in the planning and development of the program” (p. 782). They also emphasize that such practices need to overcome the sectoral model and the medicalizing paradigm adopted by health and advance in the construction of intersectionality, citizenship, empowerment and social participation.

Regarding national educational policies and the curriculum, Driessen-Willems et al. (2022) consider that the approaches fit the existing curriculum, guidelines, and legislation, which facilitates the implementation of health promotion actions in schools. According to the authors, “the fit formalized the approach, and it created awareness among teachers, who were then less inclined to ignore it” (p. 8). In addition, the research reveals that factors related to local and national dissemination of the HPS approach facilitate its dissemination and contribute to the internalization of this type of approach in schools.

As for teacher motivation and student engagement, it is noted that this is a factor that has been shown to be a facilitator in several studies (Bartelink & Bessems, 2021; Driessen-Willems et al., 2022; Ramos et al., 2013; Silva et al., 2019). Three of the five national coordinators participating in the SHE 2020 report (Bartelink & Bessems, 2021) - Norway, Slovenia, and Wales - identify that, when appropriate, motivation, interest, involvement, and leadership, especially from teachers, are essential for the implementation of school health promotion. Similarly, the research by Driessen-Willems et al. (2022) reveals as a facilitating factor for approaches to health promotion programs the support of stakeholders, both inside and outside the school environment, such as coordination, teachers, students, school council, health program professionals, school boards, without which the project would not work.



The participation and fulfillment of the roles and responsibilities of all educational actors are essential for the health education strategy to be effective (Silva et al., 2019). Likewise, the study by Ramos et al. (2013), aiming to evaluate a health promotion strategy in Spain, shows that the participation of the different educational community actors is qualified as a substantial strategy to ensure the continuity and value of the strategy in question.

The study conducted by Ramos et al. (2013) also supports the idea that becoming a mandatory health and well-being school is a facilitator for implementing health promotion in schools. According to the authors, teachers and health professionals working in educational centers suggest that there should be incentives and recognition, through the award of a health education accreditation certificate, for schools that meet the criteria, allowing them to have their own agenda for implementing and disseminating the project, thus ensuring its quality.

It is worth noting that training and the support of HPS coordinators were also facilitating factors for implementing health promotion in schools. According to the findings of Ramos et al. (2013) and Simovska et al. (2012), these two components are critical for the successful implementation of health education in schools. It is assumed that the continuous training of teachers and other education and health professionals, and the creation of a space for meeting and sharing between the agents involved contribute to the success of health education (Ramos et al., 2013).

### **Barriers to implementing health promotion in schools**

Teacher overload, the view that it is an additional activity, and the lack of time and energy of school staff are revealed as the major barriers to implementing health promotion in schools. On the other hand, bureaucracy, lack of monitoring and political support, and lack of priority on the political agenda are the barriers that least interfere with the implementation of health promotion in schools in the countries analyzed (Figure 3).

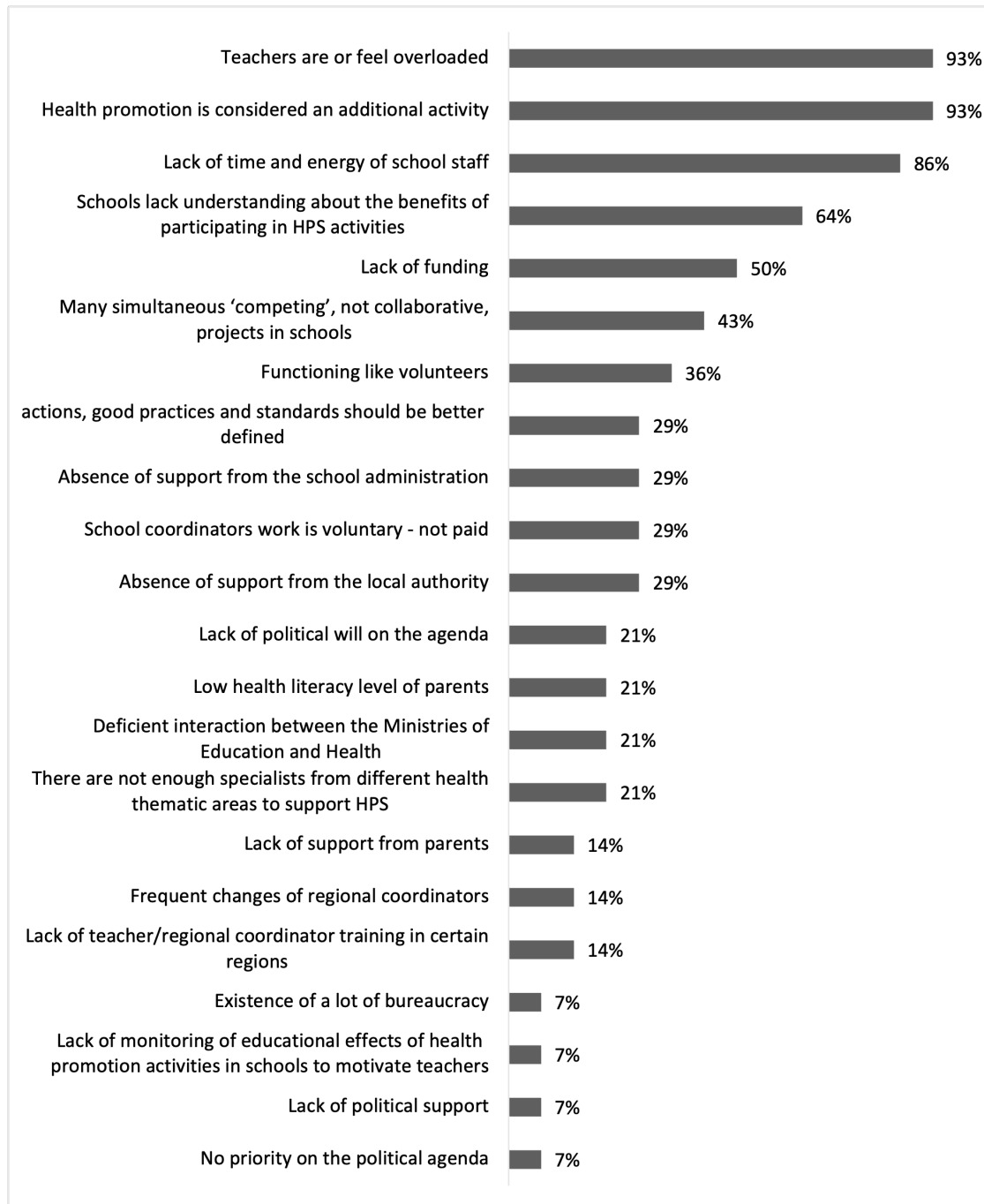


Figure 3. Significant barriers to implementing health promotion in schools across countries



The present study's findings endorse those pointed out by Ramos et al. (2013) and Simovska et al. (2012), which show that one of the main problems faced in implementing the HPS approach is the participants' shortage of time. The study by Driessen-Willems et al. (2022) corroborates the idea, stating that some of the approaches were inhibited by the "reluctance of school staff members to change in the school, which was often a result of insufficient time and low priority for the HPS approach at the school" (p. 6). According to the authors, the insufficient time available to school staff, especially when there is a heavy workload, was a barrier, especially when implementing multiple essential components of HPS.

Data from the SHE monitoring report 2020 (Bartelink & Bessems, 2021) reinforces the difficulties of implementing projects due to the participants' lack of time. According to the report, many barriers are related to the limited time available to school partners, such as nurses and psychologists. According to the national coordinators participating in the survey, these actors are often very busy with the individual care of students, leaving limited time for health promotion activities at school. They also point out the insufficient time of external partners, such as local health teams or the HPS coordinator, who have many tasks that end up competing with the support dedicated to schools (Bartelink & Bessems, 2021).

The barrier of health promotion being considered an additional activity is associated with the barrier of not understanding the benefits of participating in HPS activities. Both might be related to the fact that the actors involved in the program could not find an association between it and school activities. This is supported by Driessen-Willems et al. (2022), who argue that low compatibility with school working procedures and staff uncertainty about the outcomes of HPS programs are a major barrier to the implementation of health promotion in schools. They also claim that many schools are unwilling to share their experiences with the HPS approach since this is not considered as a priority.

Data presented in the SHE Monitoring Report 2020 corroborate those above. The lack of understanding of the benefits of HPS activities may be alluded to the lack of understanding of the approach itself since it was evidenced that, in general, schools in the analyzed countries "implement HP efforts as separate actions and activities, without being aware of the need for a systematic whole school approach" (Bartelink & Bessems, 2021, p. 4). The report showed that the presence of barriers related to national policies was perceived, represented by the categories lack of political support and lack of political support on the agenda in the SHE monitoring reports. This issue was also found in the study by Simovska et al. (2012), who identified the lack of development of implementation and evaluation policies as one of the main barriers to implementing health promotion in schools.

Given the challenges faced in implementing the HPS, Silva et al. (2019) suggest that "health activities in the school environment should favor a more reflective and critical action of the concept of health, with the investigation of demands and themes relevant to the school community and particularly to schoolchildren" (p. 484). They emphasize the relevance of disseminating documents from the HPS initiative in educational institutions, public bodies, and events that reach the general population. Lack of stakeholder commitment and support also emerged as barriers to implementing the HPS approach in schools. These data are supported by the research of Driessen-Willems et al. (2022), which reveals that a common barrier to implementing multiple essential components of health programs is the lack of commitment from health professionals, parents, students, and teachers.



Furthermore, Silva et al. (2019) highlight an indispensable factor for school health promotion: the development of a healthy school environment, as mentioned by all the studies analyzed. According to the authors, the school environment enables students to act as agents of change, contributing “to positive and sustainable changes in knowledge, attitudes and behaviors related to the care of the environment and, thus, to improve and protect the environment in which they operate behaviors” (p. 482).

Barriers regarding the school environment were also mentioned by two of the five countries participating in the SHE monitoring report 2020: Portugal and Wales. According to the national coordinators of these countries, the influence of parents, who sometimes “perceive that the school is interfering with how they raise their child” (Bartelink & Bessems, 2021, p. 6), can decrease their support for school health promotion activities. Although the category “promotion of a healthy school environment” does not appear in the SHE reports, this can be reflected in the reports’ indication in the category “actions, good practices and standards should be better defined”, indicated as a barrier by 30% of the SHE monitoring reports.

Therefore, considering the promotion of a healthy school environment as a difficulty, the results of the present study are consistent with Silva et al. (2019), who indicated that this category is one of the main challenges to be faced by schools. These results are also supported by the study by Penteado and Pereira (2007), which surveyed a sample of 128 public school teachers regarding aspects associated with quality of life and their relationship with vocal health issues. The authors identify that the school environment, classified as the environmental domain, including aspects related to “lack, insufficiency, inadequacy or dissatisfaction regarding leisure, money, information, work environment, health services and means of transportation” (p. 241), proves to be the most impaired and with the lowest degree of satisfaction.

It is worth noting that the quarantine, due to the COVID-19 pandemic, has generated numerous barriers to the implementation of health promotion in schools, drastically altering activities because of country-specific measures to combat the pandemic (Bartelink & Bessems, 2021). Besides confinement, one of the most mentioned barriers is the limited time available for the implementation and for carrying out the activities. According to the SHE monitoring report, school staff - teachers, principals, and support staff - had even less time to devote to health promotion activities, while local and national organizations that support schools in implementing health promotion had to reorient their activity to respond to the problems generated by the pandemic. Such a situation is likely to have generated a decrease in children’s healthy behaviors and an increase in sedentary behavior due to the lockdowns carried out during the quarantine, further intensifying the need for health promotion in schools (Bartelink & Bessems, 2021).

## Conclusions

To conclude, although many schools in the European Union are HPS, not all follow the HPS approach in planning their activities. Many schools have adapted pre-existing curricula and programs to the school context, and this strategy was found to be the fastest and most effective.





Within this health promotion effort by schools, it can be inferred that two of their main limitations are the guidance and support of professionals who develop, coordinate, and support the HPS programs, as well as governmental financial support, whether the HPS approach is applied.

According to the analysis carried out on the themes developed in the health promotion programs, it is possible to note that the most addressed themes were related to the promotion of physical activity and healthy nutrition, and the prevention of the consumption of psychoactive substances. On the other hand, the least addressed topics were vaccination, gender equality and oral health. Therefore, there is a clear need to address the less developed themes due to their considerable relevance, namely in issues related to the promotion of well-being, violence, and safety, which were only identified in three reports but which are one of the main objects of concern for teachers and school managers.

Regarding the identification of elements that facilitate health promotion in schools, the most mentioned were the collaboration between the educational sector, particularly at the curricular level, and the political sector. On the other hand, the integration in the SHE network, the support provided by the Ministry of Health, and the exchange of good practices were the least mentioned, despite their great relevance. The research also evidenced that the dissemination at the local and national level of the HPS approach, besides contributing to its dissemination, is also a facilitator of school health promotion. Other elements to consider are motivation, interest, and involvement of teachers, students and other individuals in the educational community, including professionals in health programs that originate outside the school space. The study also indicates that the existence of a certificate of accreditation in health education can be an important enabler of quality in the implementation and dissemination of projects in this area. Finally, another element that facilitates health promotion in schools is the continuous training of teachers and other education professionals, particularly considering the project coordination teams.

In terms of barriers to implementing health promotion in schools, the main ones identified are teachers' workload, lack of time, lack of commitment, lack of energy, and lack of motivation of school staff, partners, parents, and students. The perception that health promotion is considered a non-priority, or in other words, a set of secondary activities, is also one of the main difficulties in this mission. On the contrary, in this study, it is observable that the barriers that least interfere with implementing health promotion in schools are the bureaucratic processes, the reduced or complete absence of monitoring, and also the low priority that health education receives on the political agenda.

In a final analysis, the study also indicates that all professionals involved in health promotion in the school context have shown a greatly diminished capacity for intervention during the moments of confinement associated with the COVID-19 pandemic. This fact, together with the decline in healthy behaviors in young people during this same period, thus contributes to an urgent reflection and intervention in the promotion of health education in schools.

## Authors contributions

Conceptualization: MC, HO and JB; Methodology: MC, HO and JB; Software: N/A; Validation: MC, HO and JB; Formal analysis: MC, HO and AC; Investigation: MC, HO, FT, AC and JB;



Resources: MC and FT, HO and JB; Data curation: MC and HO; Writing – original draft: MC and HO; Writing – review and editing: MC, HO, AC and JB; Visualization: MC, HO, FT, AC and JB; Supervision: JB; Project administration: N/A; Funding acquisition: N/A.

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